### TRUNKLINE PLAN



MICHIGAN STATE HIGHWAY DEPARTMENT
JOHN C. MACKIE, COMMISSIONER

#### MICHIGAN STATE HIGHWAY DEPARTMENT

LANSING. 26



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March 10, 1960

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Mr. J. D. Cruise Chief Planning Engineer Michigan State Highway Department Lansing, Michigan

Dear Mr. Cruise:

Attached is the "Trunkline Plan For The City of Midland". This plan was developed co-operatively by the Planning Division and The Planning Department of the city of Midland. It represents, as do other trunkline plans prepared by the Planning Division, the level of agreement which has been attained by state and local planners on long-range planning objectives. In this plan, the agreement covers the entire trunkline system as herein presented.

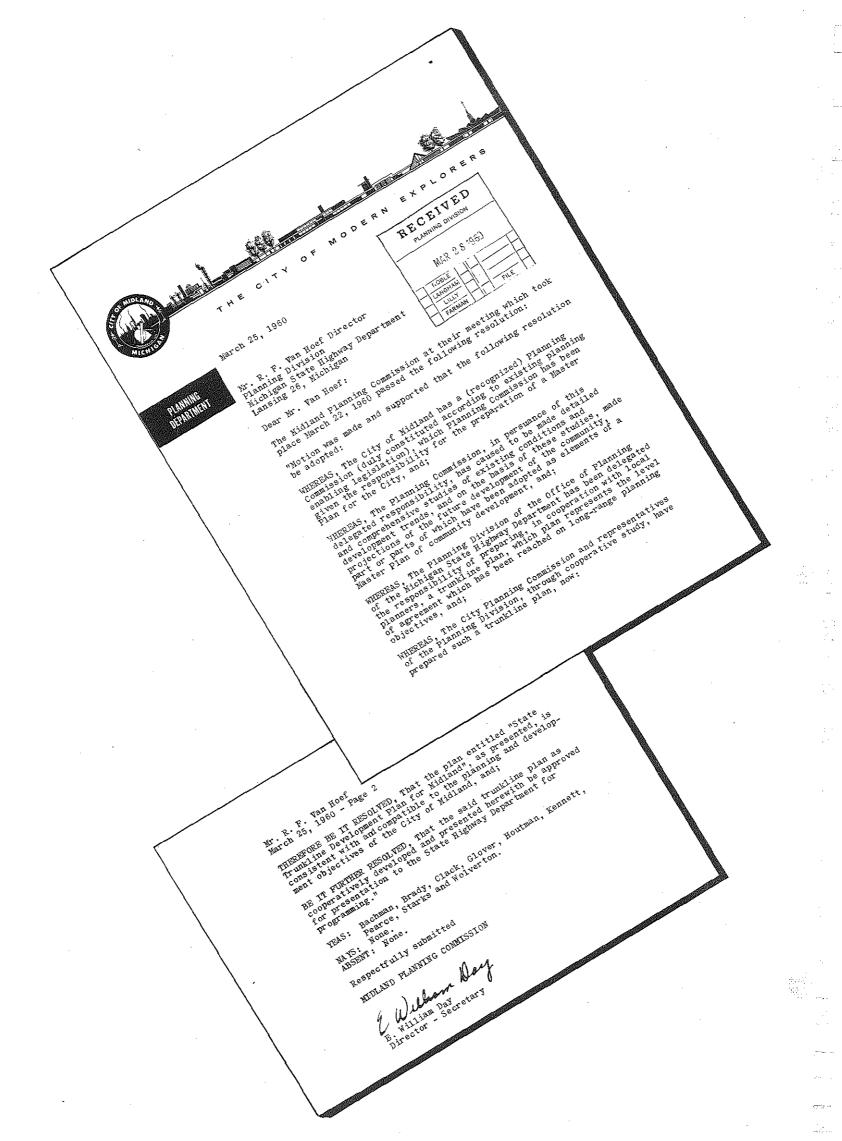
Certain elements of this plan will require further study and precising before they can become a final program item. These include the development of the Indian-Buttles one-way system which is being considered for inclusion in the 1963-68 urban program and the future need for additional capacity on Isabella Street (M-20) for which the type of improvement should be determined and then programmed on the priority basis.

We recommend that Route Location be requested to make engineering feasability studies of these two routes. The balance of this plan has either been constructed recently, is now under construction, or is included in Commissioner Mackie's "1958-62 Construction Program."

Respectfully submitted,

Robert F. Van Hoef, Director

Planning Division



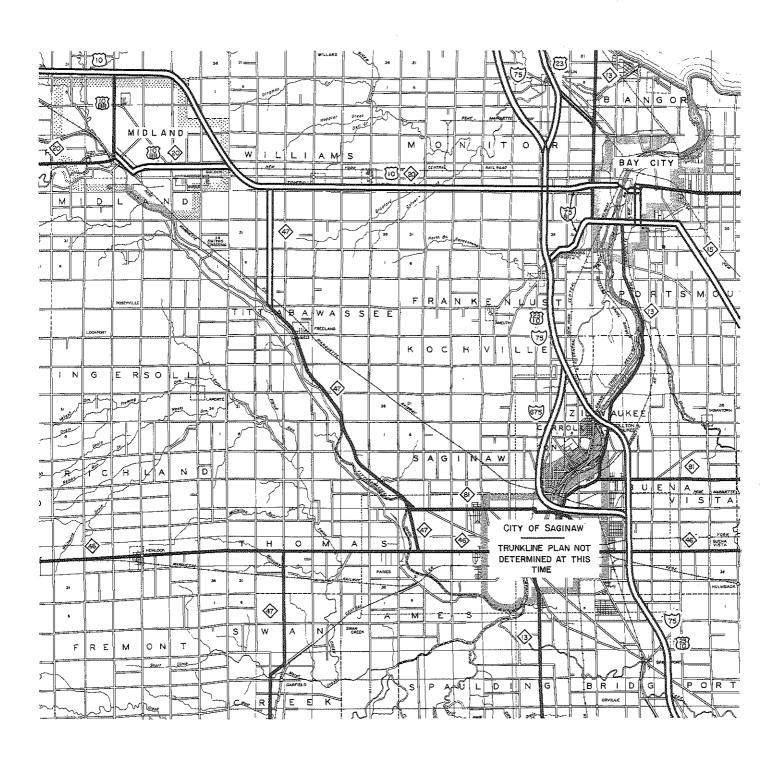
#### INTRODUCTION

In Commissioner Mackie's "1958-'62 Highway Construction Program", the Midland area has been the recipient of a very high percentage of this construction program. Under the priority method now employed by the Michigan State Highway Department for the selection and scheduling of construction projects, this high volume of work is indicative of the tremendous economic and population growth that has taken place in recent years.

In 1957 the Midland area was served by 23 miles of state trunkline, which was primarily 2 lane highways. For statistical comparision this area extends from the west city limits to the relocation of US-10 east and southeast of the city. Upon the completion of the "1958-62 Construction Program" the state trunkline system will comprise 25 miles, of which 21.7 miles will have been completely reconstructed. Much of this reconstruction will be on new location as limited access expressways. These 21.7 miles represent 87% of the state trunkline mileage for this area. This leaves only 3.3 miles or 13% on which future improvements will be a direct result of this plan. However, it was determined that this plan should be published to indicate approval of these final steps and to make the record complete for this period of highway planning in the Midland Area.

There has been no attempt to establish the life expectancy of this system. The time period for which a planned system can be expected to operate efficiently will vary with each individual area. If the city of Midland continues to expand at the same rate that it has in the past, additions and/or alterations will be needed much sooner than if this expansion begins to taper off. However, each segment of this plan, as herein presented, should remain as an integral part of the primary transportation network, and we are confident that the people of the State of Michigan, in general, and those in this area, in particular, will receive optimum benefit from their tax dollars which will be expended in the development of this plan.

# TRI-CITY AREA TRUNKLINE PLAN



Note: This map indicates trunkline numbering Changes that will occur during the 1958-1962 construction program.

LEGEND

EXPRESSWAYS, DIVIDED HIGHWAYS & ONE-WAY STREET SYSTEMS

OTHER STATE TRUNKLINES

SCALE 1 0 1 2 3 Mi. PLATE NO. I

#### TRI-CITY AREA TRUNKLINE PLAN

To completely analyze the area trunkline requirements of the city of Midland it is necessary to include the cities of Bay City and Saginaw. Outside of the Detroit Metropolitan Area, there is no other area in Michigan where three separate cities of this magnitude are located in such close proximity. The interrelationship that exists in these metropolitan areas necessitates providing for the additional traffic which is generated between these three major areas of traffic attraction as well as providing for the traffic from outside the tri-city area to each of the individual cities.

The Michigan State Highway Department has recognized this need and the Tri-City area was the target of a large share of the "1958-62 Highway Construction Program". The Tri-City Trunkline Plan as shown on Plate No. 1 is not a complete plan at this time because there are additional studies to be made in this area. It is shown, however, to point out the relationship between this plan for Midland and the Tri-City plan as of this date.

By the end of this year all three of these cities will be connected by limited access expressways. The following rural projects are either completed or under construction:

- 1. M-20 (future US-10) from Midland to Bay City was completed in 1959 as a limited access expressway
- 2. Interstate route 75 (US-10 & 23) from Bridgeport southeast of Saginaw to M-81, to be completed in 1961 as a limited access expressway
- 3. Interstate route 75 (US-10 & 23) from M-81 to existing US-23 (future M-13) was completed in 1959 as a limited access expressway
- 4. Interstate route 75 (US-10 & 23) from existing US-23 (future M-13) to M-20 to be completed in 1960 as a limited access expressway

The rural projects in the immediate vicinity of Midland are described with the city plan.

In addition, the "1958-62 Highway Construction Program" includes the extension of Interstate Route 75 (US-23) from M-20 north to a point south of Kawkawlin as an expressway, and then continues north as (US-23) to existing US-23 at Kawkawlin as a divided highway on limited access right-of-way. Future programming will include the extension of Interstate Route 75 south of Kawkawlin north to the vicinity of Standish and then northwesterly to US-27 south of Grayling.

MICHIGAN STATE HIGHWAY DEPARTMENT

#### STATE TRUNKLINE AND ARTERIAL STREET PLAN

On September 16, 1958 the Midland City Planning Commission adopted, as part of their master plan, the city arterial street system as shown on Plate No. 2. Superimposed over this system is the state trunkline system as herein proposed. The interdependence of these two systems makes a collective analysis of both essential in the development of an urban transportation system. The state trunklines and the major streets make up the skeletal system around which the entire city traffic moves. The most elaborate trunkline system would be very ineffective if there is not an adequate major street system to enhance its operation.

Though these two systems are the responsibility of separate local & state jurisdictions, they must be developed co-operatively if the motoring public is to receive the optimum benefit of their tax dollars. With the rising costs of highway construction and the ever increasing volumes of traffic utilizing our roads and streets, it behooves us all in the field of transportation planning to insist upon obtaining the full potential of all our existing facilities. The development of an extensive one-way street system is one of the most economical methods of increasing the capacity of our street systems. Another example of economy planning is a trunkline which has become congested might be restored to operational efficiency by removing parking from a paralleling major street and thereby inducing local traffic over onto it.

It is the responsibility of the Michigan State Highway Department to provide trunkline service into and through all cities of state wide importance. These highways in Michigan cities are usually designed and located so that they carry a large volume of local traffic as well as the state trunkline traffic. These routes will continue to be expanded and developed to meet future traffic demands. It is absolutely essential that the local planners and city officials be cognizant of the ever increasing traffic requirements. The capacity of the city arterial system must also be expanded to facilitate its fair share of this traffic burden if a truly efficient transportation system is to become a reality.

#### CITY ARTERIAL STREET SYSTEM

The city arterial street system plan is a product of the Midland Planning Commission. It consists of two distinct systems, the major street system, which includes the state trunkline system, and the collector street system. Each of these systems makes a definite contribution to the overall plan.

It is the function of the major street system to provide access to the areas of the city which have a high attraction for traffic. This system is completely dependent on the land use pattern. It must serve large tracts of residential land as well as highly concentrated commercial and industrial areas. It must be conceived and designed to carry the brunt of the city's traffic load. As a rule these streets should always form a continuous system.

The major street system is further augmented by a system of collector streets. This system, as the name implies, collects and distributes traffic. There are at least three distinct uses for this type of street. They are:

- 1. To further sub-divide large residential areas, collecting and distributing traffic between the major and local system
- 2. Provide for the interchange of traffic between major streets in high traffic density areas
- Provide for access to major traffic attractions that are not located on the continuous major street system

Generally, the standard specifications for a collector street will be somewhat less than those for a major street in a comparable area.

This arterial system has been reviewed in these respects by the Planning and Traffic Divisions of the Michigan State Highway Department. It seems to be a well conceived plan. The utilization of one-way streets in the high traffic density areas is a step in the right direction. The systematic development of this plan to the necessary standards in conjunction with the proposed trunkline improvements will provide the city of Midland with a well integrated, and what appears to be, a very adequate arterial street system.

#### STATE TRUNKLINE SYSTEM

This state trunkline plan is very similar to the plan as proposed in "The Midland Metropolitan Area Traffic Study" published in July of 1953. It differs only in minor alignment changes resulting from actual route location studies, plus the determination that US-10 BR and M-20 (Ellsworth Street) in the downtown area should be replaced with a one-way system consisting of Indian and Buttles Streets. As stated in the introduction of this report, the Midland area has been the recipient of a large portion of the highway construction program. The following projects are either completed or under construction:

- US-10BR (Eastman Road) from Ellsworth Street north to proposed US-10 was constructed as a multi-lane highway in 1959
- 2. US-10 (future M-47) from existing US-10 north of Freeland to M-20 east of Midland is now under construction (to be completed 1960). This is the first stage of an ultimate expressway design. Upon the completion of this project, existing US-10 (Saginaw Road) from existing M-20 (Bay City Road) south to existing US-10 north of Freeland will be transferred to local authority
- 3. US-10 from M-20 (Bay City Road) northwest and west to Stark Road west of Midland is under construction as a limited access expressway. (This expressway will be extended to US-27 at Clare during this same construction program.) Upon completion of this project, existing US-10 (Saginaw Road), from the west city limits to Bay City Road will be transferred to the city of Midland as a city major street.

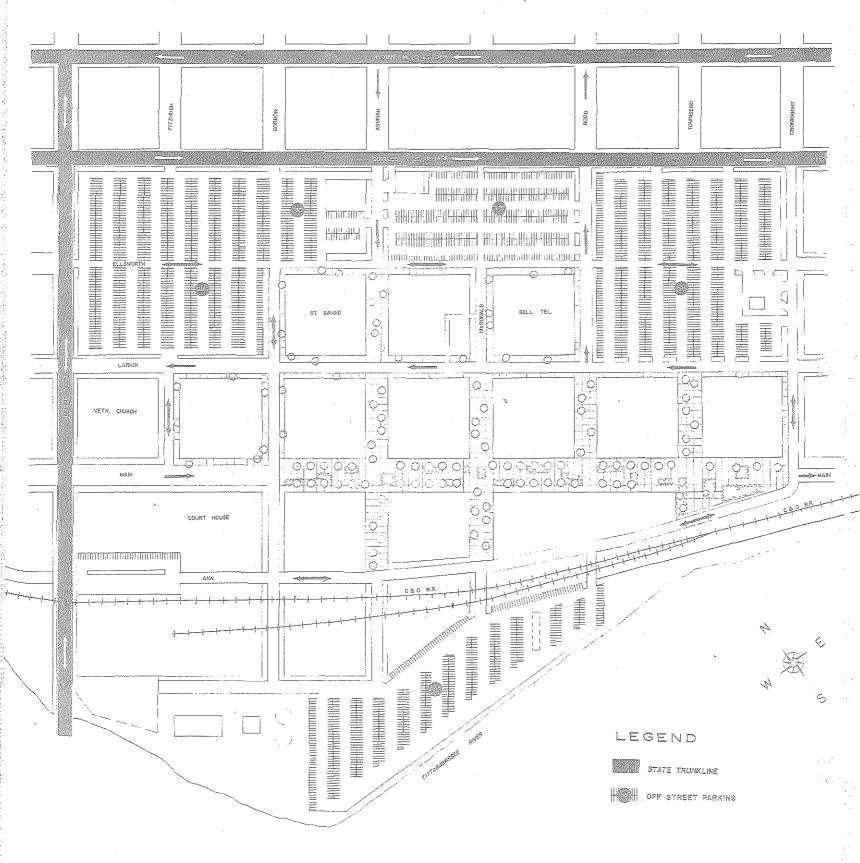
Also included in the 1958-62 program and now scheduled to go under contract in 1960 is M-20 & US-10 from relocated US-10 west and southwest to existing M-20 and US-10BR. This will be constructed as an expressway to a point west of Saginaw Road where it will then go into a one-way street system. Upon completion of this project, existing M-20 from Second Street east to the new location of US-10 will be transferred to local authority.

Proposed in this plan and recommended for early programming is the development of the Indian-Buttles one-way system to replace existing Ellsworth Street in the downtown area. This can be accomplished through stage construction, by constructing Buttles Street and pairing it with Ellsworth Street in one-way operation then later constructing Indian Street to be paired with Buttles Street; or, construct both Indian and Buttles at the same time and transfer Ellsworth to local authority. Further discussion of this proposed revision is included with the Central Business District Section of this report.

Another facet of this plan is the future widening or reconstruction of M-20 from the west city limits to the Titabawassee River. This improvement should be made on the priority basis and should be studied in conjunction with future planning for M-20 west of Midland. It is estimated at this time that this improvement will be necessary in approximately ten years.

## PROPOSED REDEVELOPMENT OF THE CENTRAL BUSINESS DISTRICT

AS PROPOSED BY THE MIDLAND PLANNING DEPARTMENT — APRIL 15, 1959



#### CENTRAL BUSINESS DISTRICT

This CBD Redevelopment Plan is not a part of the city master plan at this time. However, it is indicative that the city of Midland is not only cognizant of the problems involving the CBD, but that they are in the process of solving these problems. They have recognized the necessity of off-street parking, and have already started developing the parking areas as shown.

The pedestrian mall concept has been incorporated into this plan. This approach to beautify the CBD is becoming very popular with urban planners. There is no doubt that if the CBD is to retain its position as the primary commercial, cultural and civic complex of a city it must be made attractive. The American people are demanding that they be given these pleasant surroundings. This is true in all phases of our way of life; in the home, at work, at recreation areas, and where we shop and take care of our daily business transactions. Also high on the list of pre-requisites for a CBD is its accessibility. A great deal of care must be taken in the planning stage to assure that this accessibility is held in its true position with the other factors which are essential to a redevelopment program.

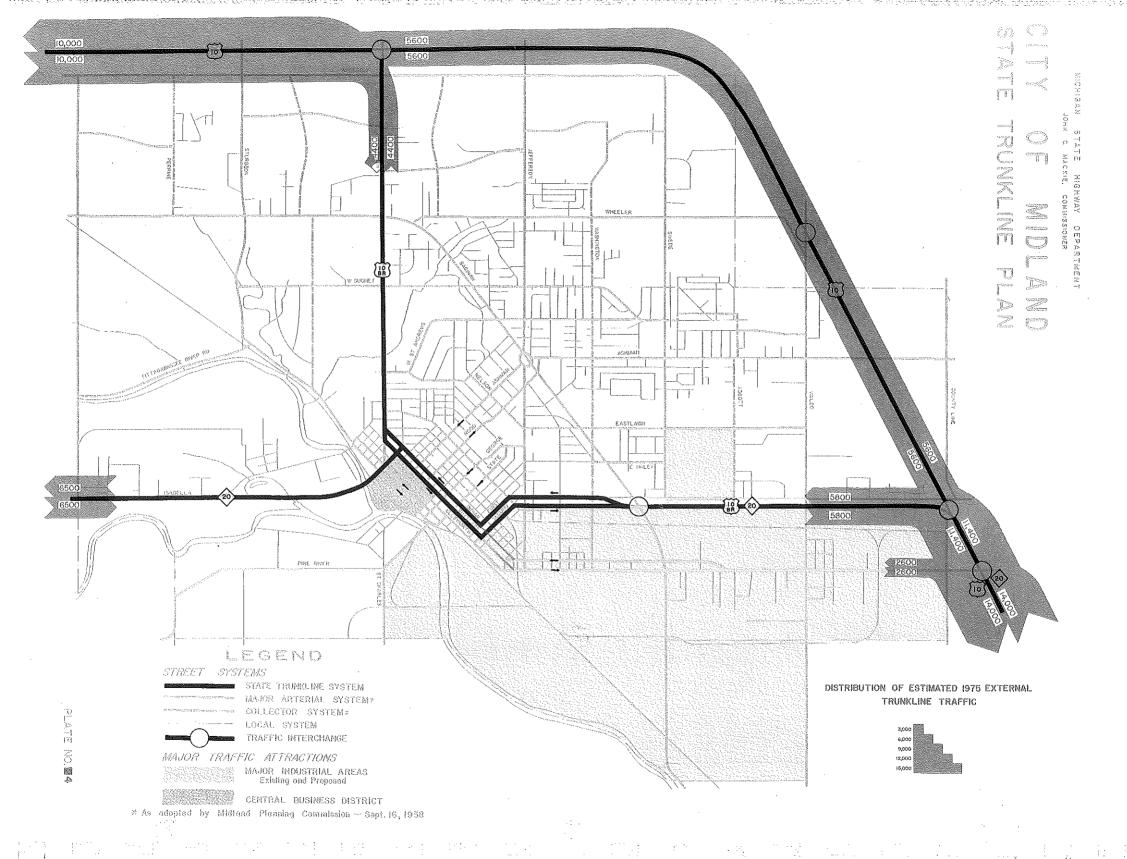
A vital consideration of this plan is the eventual alteration of the trunkline system in the CBD area. Due to the Tittabawassee River the expansion of this area will by necessity engulf the Ellsworth Street axis. By altering the trunkline system from Ellsworth Street to the Indian-Buttles one-way system will free Ellsworth of the thru cross-town traffic leaving it clear to provide for the circulatory traffic in and around the CBD. Thus the new axis of Indian and Buttles will bring traffic to and thru the CBD but will not become unnessisarily involved with the interior traffic of this area.

#### TERMINAL FACILITIES PLAN

It is a policy of the Michigan State Highway Department that parking will be eliminated from all state trunklines either at the time of their improvement or when the need for additional traffic capacity dictates that it be done.

It is therefore necessary that the local community initiate a terminal facility plan if the state trunkline plan is to be effectuated and parking removed therefrom.

As indicated on Plate No. 3, the city of Midland is aware of this responsibility and are working toward this goal by providing adequate off-street parking.



#### OFFICE MEMORANDUM



March 4, 1960

File: Midland City Wide

R. Van Hoef, Director Planning Division

Harold G. Bauerle, Director All Caucelle Traffic Division

Subject: Traffic Division Review of the Midland Trunkline Plan.

Reference is made to your memo of February 18, 1960, requesting our review of the above trunkline plan. We concur in the plan as presented. Enactment of this plan should greatly improve trunkline operations and local-street operations in the City of Midland.

HGB:HMH:vio

cc: L. J. Mikulich W. L. Marvin

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